

CLAIMS:

Please **AMEND** the claims as follows

1-8. (Previously Cancelled)

9. (Previously Amended) A computer-readable medium containing a data structure, the data structure comprising:

a plurality of rows; and

a type column adapted for storing a type value associated with each of the plurality of rows of the data structure, each type value indicating columns of the data structure associated with the corresponding row, thereby enabling the columns for each of the plurality of rows to vary based upon the type value for that row, wherein the type column is separate from the columns identified by each type value stored in the type column.

10. (Previously Amended) The computer-readable medium of claim 36 wherein a sub-column of one of the sub-rows of the nested data structure includes a further nested data structure.

11. (Previously presented) The computer-readable medium of claim 9 wherein the data structure is a nested conditional relation data structure.

12. (Previously Amended) The computer-readable medium of claim 9 wherein at least two rows of the data structure contain different type values in the type column.

13. (Previously Amended) The computer-readable medium of claim 36 wherein at least two sub-rows of the data structure contain different type values in the type sub-column.

14. (Previously Amended) The computer-readable medium of claim 9 wherein the type value for each of the plurality of rows identifies a schema for a type.

15. (Currently Amended) A method in a computer system for creating a data structure, the method comprising:

identifying a type value associated with each of the plurality of rows of the data structure, each type value indicating columns of the data structure associated with the corresponding row, thereby enabling the columns for each of the plurality of rows to vary based upon the type value for that row; and

storing the type value for each of the plurality of rows of the data structure in a type column of the data structure, thereby enabling the columns for each of the plurality of rows to vary based upon the type value for that row, wherein the type column is separate from the columns identified by the type values stored in the type column;

storing data in the columns for each of the plurality of rows; and
retrieving data from one or more of the plurality of rows of the data structure, where the retrieved data is obtained from one or more of the columns indicated by the type value for that row.

16. (Previously Amended) The method of claim 38 wherein a sub-column of a sub-row of the nested data structure includes a further nested data structure.

17. (Previously Amended) The method of claim 15 wherein the data structure is a nested conditional relation data structure.

18. (Previously Amended) The method of claim 15 wherein at least two rows of the data structure contain different type values in the type column.

19. (Previously Amended) The method of claim 38 wherein at least two sub-rows of the nested data structure contain different type values in the type column.

20. (Previously Amended) The method of claim 15 wherein the type value for each of the plurality of rows identifies a schema for a type.

21. (Previously presented) The method of claim 15 including:

providing a data store in a first format;

providing a mapping of the first format to a second format;

receiving a query for a data store based on the second format;

generating a query based on the first format using the received query and the provided mapping; and

executing the generated query based on the first format against the provided data store in the first format to generate data wherein the generated data is stored in the created data structure.

22. (Previously presented) The method of claim 21 including converting the data of the created data structure into data in the second format.

23. (Previously presented) The method of claim 21 wherein the second format is an XML format.

24. (Currently Amended) A computer system for creating a data structure having a plurality of rows, comprising:

means for identifying a type value associated with each of the plurality of rows of the data structure, each type value indicating columns of the data structure associated with the corresponding row, thereby enabling the columns for each of the plurality of rows to vary based upon the type value for that row; and

means for storing the type value for each of the plurality of rows of the data structure in a type column of the data structure, thereby enabling the columns for each of the plurality of rows to vary based upon the type value for that row, wherein the type column is separate from the columns identified by the type values stored in the type column;

means for storing data in the columns for each of the plurality of rows; and

means for retrieving data from one or more of the plurality of rows of the data structure, where the retrieved data is obtained from one or more of the columns indicated by the type value for that row.

25. (Previously Amended) The computer system of claim 40 wherein a sub-column of a one of the sub-rows of the nested data structure includes a further nested data structure.

26. (Previously presented) The computer system of claim 24 wherein the data structure is a nested conditional relation data structure.

27. (Previously Amended) The computer system of claim 24 wherein at least two rows of

the data structure contain different type values in the type column.

28. (Previously Amended) The computer system of claim 40 wherein at least two sub-rows of the nested data structure contain different type values in the type sub-column.

29. (Previously Amended) The computer system of claim 24 wherein the type value for each of the plurality of rows identifies a schema for a type.

30. (Previously presented) The computer system of claim 24 including:

a data store in a first format;

a mapping of the first format to a second format;

means for receiving a query for a data store based on the second format;

means for generating a query based on the first format using the received query

and the mapping; and

means for executing the generated query based on the first format against the data store in the first format to generate data wherein the generated data is stored in the created data structure.

31. (Previously presented) The computer system of claim 30 including converting the data of the created structure into data in the second format.

32. (Previously presented) The computer system of claim 30 wherein the second format is an XML format.

33. (Previously Cancelled)

34. (Previously Cancelled)

35. (Previously Cancelled)

36. (Previously Amended) The computer-readable medium as recited in claim 9, the data structure further comprising:

a nested data structure in a column of one of the plurality of rows of the data structure, the nested data structure including sub-rows and a type sub-column, each of the sub-rows having an associated type value in the type sub-column, each type value in the type sub-column indicating a set of one or more sub-columns of the nested data structure associated with the corresponding sub-row, thereby enabling the set of sub-columns for each of the plurality of sub-rows to vary based upon the type value for that sub-row, wherein the type sub-column is separate from the sub-columns identified by the type values stored in the type sub-column.

37. (Previously Cancelled)

38. (Previously Amended) The method as recited in claim 15, wherein the data structure further comprises:

a nested data structure in a column of one of the plurality of rows of the data structure, the nested data structure including sub-rows and a type sub-column, each of the sub-rows having a type value stored in the type sub-column that indicates a set of one or more sub-columns of the nested data structure associated with the corresponding sub-row, thereby enabling the set of sub-columns for each of the plurality of sub-rows to vary based

upon the type value for that sub-row, wherein the type sub-column is separate from the sub-columns identified by the type values stored in the type sub-column.

39. (Previously Cancelled)

40. (Previously Amended) The computer system as recited in claim 24, wherein the data structure further comprises:

a nested data structure in a column of one of the plurality of rows of the data structure, the nested data structure including sub-rows and a type sub-column, each of the sub-rows having a type value stored in the type sub-column indicating one or more sub-columns of the nested data structure associated with the corresponding sub-row, thereby enabling the sub-columns for each of the plurality of sub-rows to vary based upon the type value for that sub-row, wherein the type sub-column is separate from the sub-columns identified by the type values stored in the type sub-column.

41. (Previously Cancelled)

42. (Previously Added) The computer-readable medium as recited in claim 9, wherein the type value associated with each of the plurality of rows identifies a row type for the corresponding row.

43. (Previously Added) The method as recited in claim 15, wherein the type value for each of the plurality of rows identifies a row type for the corresponding row.

44. (Previously Added) The computer system as recited in claim 24, wherein the type

value for each of the plurality of rows identifies a row type for the corresponding row.

45. (Previously Added) The computer-readable medium as recited in claim 9, wherein the type values stored in the type column are not data elements and the columns identified by the type values are adapted for storing data elements.

46. (Previously Added) The method as recited in claim 15, wherein the type values stored in the type column are not data elements and the columns identified by the type values are adapted for storing data elements.

47. (Previously Added) The computer system as recited in claim 24, wherein the type values stored in the type column are not data elements and the columns identified by the type values are adapted for storing data elements.

Please **ADD** new claims as follows:

48. (New) The computer-readable medium as recited in claim 9, wherein data is stored in the columns for each of the plurality of rows, thereby enabling the data to be retrieved from the columns indicated by the type value for that row.

49. (New) The method as recited in claim 48, further comprising:
computer-readable instructions for retrieving data from one or more of the plurality of rows of the data structure, where the retrieved data is obtained from one or more of the columns indicated by the type value for that row.

50. (New) The computer-readable medium as recited in claim 9, further

comprising:

computer-readable instructions for storing data in the columns for each of the plurality of rows; and

computer-readable instructions for retrieving data from one or more of the plurality of rows of the data structure, where the retrieved data is obtained from one or more of the columns indicated by the type value for that row.

51. (New) The method as recited in claim 15, wherein the data stored in each of the columns is a primitive type or a nested conditional relation.

52. (New) The method as recited in claim 17, further comprising:
converting first data from a first format to a nested conditional relation prior to storing the data;
wherein storing the data includes storing the converted first data.

53. (New) The method as recited in claim 52, further comprising:
converting second data from a second format to a nested conditional relation prior to storing the data;
wherein storing the data further includes storing the converted second data.